

## LISTING OF CLAIMS

The following listing of claims will replace all prior versions, and listings of claims in the application:

1. **(Currently amended)** A purified interferon- $\alpha$  polypeptide, comprising  
a first amino acid sequence consisting of residues 1-75 of interferon- $\alpha$ ~~21a~~21b;  
a second amino acid sequence consisting of residues 76-81 of interferon- $\alpha$ 2c or residues  
76-81 of interferon- $\alpha$ ~~21a~~21b;  
a third amino acid sequence consisting of the sequence LDKFXTELXQQQLND or the  
sequence LEKFXTELXQQQLND, wherein X is any amino acid residue; and  
a fourth amino acid sequence consisting of residues 96-166 of interferon- $\alpha$ 2c;  
wherein the hybrid interferon- $\alpha$  polypeptide has interferon- $\alpha$  protein biological activity.
2. **(Previously presented)** The purified interferon- $\alpha$  polypeptide according to claim 1,  
wherein the second amino acid sequence consists of residues 76-81 of interferon- $\alpha$ 2c.
3. **(Currently amended)** The purified interferon- $\alpha$  polypeptide according to claim 1,  
wherein the second amino acid sequence consists of residues 76-81 of interferon- $\alpha$ ~~21a~~21b.
4. **(Previously presented)** The purified interferon- $\alpha$  polypeptide according to claim 1,  
wherein the third amino acid sequence consists of the sequence LDKFXTELXQQQLND.
5. **(Previously presented)** The purified interferon- $\alpha$  polypeptide according to claim 1,  
wherein the third amino acid sequence consists of the sequence LEKFXTELXQQQLND.
6. **(Previously presented)** The hybrid interferon polypeptide according to claim 1,  
wherein the second amino acid sequence consists of residues 76-81 of interferon- $\alpha$ 2c and the  
third amino acid sequence consists of the sequence LEKFXTELXQQQLND.

7. **(Currently amended)** The hybrid interferon- $\alpha$  polypeptide according to claim 6, comprising an amino acid sequence with a structure M-N-O-P, wherein M consists of amino acid residues 1-75 of interferon- $\alpha$ ~~21a~~21b, N consists of amino acid residues 76 to 81 of interferon- $\alpha$ 2c, O consists of amino acid residues 82 to 95 of interferon- $\alpha$ ~~21a~~21b, and P consists of amino acid residues 96 to 166 of interferon- $\alpha$ 2c.

8. **(Previously presented)** The hybrid interferon- $\alpha$  polypeptide according to claim 1, wherein the second amino acid sequence consists of residues 76-81 of interferon- $\alpha$ 2c and the third amino acid sequence consists of the sequence LDKFXTELXQQQLND.

9. **(Currently amended)** The hybrid interferon- $\alpha$  polypeptide according to claim 1, wherein the second amino acid sequence consists of residues wherein the second amino acid sequence consists of residues 76-81 of interferon- $\alpha$ ~~21a~~21b and the third amino acid sequence consists of the sequence LDKFXTELXQQQLND.

10. **(Previously presented)** The hybrid interferon- $\alpha$  polypeptide according to claim 1, comprising an amino acid sequence selected from the group consisting of an amino acid sequence as set forth in SEQ ID NOs: 9, 11, 30, 32, 36, 38, 40, and 42.

11. **(Previously presented)** The hybrid interferon- $\alpha$  polypeptide according to claim 10, wherein the sequence is selected from the group consisting of an amino acid sequence as set forth in SEQ ID NOs: 9, 32, 36, and 38.

12. **(Previously presented)** The hybrid interferon- $\alpha$  polypeptide according to claim 1, wherein the second amino acid sequence consists of amino acid residues 76-95 of interferon- $\alpha$ 2c.

13. **(Currently amended)** The hybrid interferon- $\alpha$  polypeptide according to claim 1, wherein the second amino acid sequence consists of amino acid residues 76-95 of interferon- $\alpha$ ~~21a~~21b.

14. **(Currently amended)** The hybrid interferon- $\alpha$  polypeptide according to claim 8, wherein the second amino acid sequence consists of residues wherein the second amino acid sequence consists of residues 76-81 of interferon- $\alpha$ 21a21b and the third amino acid sequence consists of the sequence LEKFXTELXQQLND.

15. **(Previously presented)** A nucleic acid molecule encoding a polypeptide according to claim 1.

16. **(Original)** A recombinant vector comprising the nucleic acid molecule according to claim 15.

17. **(Original)** A cell transformed with the recombinant vector according to claim 16.

18. **(Previously presented)** A pharmaceutical composition comprising:  
a pharmaceutically acceptable vehicle or carrier; and  
at least one hybrid interferon- $\alpha$  polypeptide according to claim 1.

19-23. **(Cancelled).**

24. **(Previously presented)** A nucleic acid molecule encoding a polypeptide according to claim 10.

25. **(Previously presented)** A nucleic acid molecule according to claim 24, having a nucleic acid sequence as set forth in SEQ ID NO: 8, 10, 29, 31, 35, 37, 39, or 41.

26. **(Previously presented)** A recombinant vector comprising the nucleic acid molecule according to claim 24.

27. **(Previously presented)** A cell transformed with the recombinant vector according to claim 26.

28. **(Previously presented)** A pharmaceutical composition comprising:  
a pharmaceutically acceptable vehicle or carrier; and  
at least one hybrid interferon- $\alpha$  polypeptide according to claim 10.